CLAIMS

WHAT IS CLAIMED

1. A method of acquiring and processing electrical signals produced by a patient's heart, the method comprising:

attaching six electrodes to the patient, each one of the six electrodes being attached in one of the standard ten-electrode, twelve-lead electrocardiogram positions; acquiring electrical signals from the electrodes;

providing eight leads of a twelve-lead electrocardiogram from the acquired electrical signals; and

interpolating four leads of the twelve-lead electrocardiogram from the acquired electrical signals.

- 2. The method of claim 1 and further comprising interpolating four leads of the twelve-lead electrocardiogram that correspond to four electrodes that are not attached to the patient.
- 3. The method of claim 1 and further comprising attaching four limb electrodes to the patient.
- 4. The method of claim 1 and further comprising providing at least one left precordial lead without performing interpolation and at least one right precordial lead without performing interpolation.
- 5. The method of claim 1 and further comprising attaching electrodes at standard positions for V5 and V6, and interpolating leads V1, V2, V3 and V4.
- 6. The method of claim 1 and further comprising attaching electrodes at standard positions for V2 and V5, and interpolating leads V1, V3, V4 and V6.
- 7. The method of claim 1 and further comprising attaching electrodes at standard positions for V1 and V5, and interpolating leads V2, V3, V4 and V6.

8. A method of acquiring and processing electrical signals produced by a patient's heart, the method comprising:

acquiring electrical signals for limb leads of a twelve-lead electrocardiogram; acquiring electrical signals for at least two standard precordial leads of the twelve-lead electrocardiogram; and

interpolating any remaining leads of the twelve-lead electrocardiogram from the acquired electrical signals.

- 9. The method of claim 8 and further comprising acquiring electrical signals for limb lead I and limb lead II.
- 10. The method of claim 8 and further comprising acquiring electrical signals for a left precordial lead and a right precordial lead.
- 11. The method of claim 8 and further comprising acquiring electrical signals for precordial lead V2 and precordial lead V6.
- 12. The method of claim 8 and further comprising acquiring electrical signals for precordial lead V2 and precordial lead V5.
- 13. The method of claim 8 and further comprising interpolating at least two precordial leads.
- 14. The method of claim 8 and further comprising interpolating at least three precordial leads.
- 15. The method of claim 8 and further comprising providing at least leads I, II, V2 and V5 from the acquired electrical signals without performing interpolation.
- 16. The method of claim 15 and further comprising providing lead V3 without performing interpolation.
- 17. The method of claim 16 and further comprising providing lead V1 without performing interpolation.

- 18. The method of claim 17 and further comprising providing lead V6 without performing interpolation.
- 19. A device for acquiring and processing electrical signals produced by a patient's heart, the device comprising:

six electrodes each for attachment to the patient in one of the standard tenelectrode, twelve-lead electrocardiogram electrode positions; and

a signal processor connected to the six electrodes, the signal processor acquiring electrical signals from the electrodes, providing eight leads of a twelve-lead electrocardiogram from the acquired electrical signals, and interpolating four leads of the twelve-lead electrocardiogram from the acquired electrical signals.

20. A device for acquiring and processing electrical signals produced by a patient's heart, the device comprising:

a plurality of electrodes each for attachment to the patient in one of the standard ten-electrode, twelve-lead electrocardiogram electrode positions; and

a signal processor connected to the plurality of electrodes, the signal processor acquiring electrical signals for limb leads of a twelve-lead electrocardiogram, acquiring electrical signals for at least two precordial leads of the twelve-lead electrocardiogram, and interpolating any remaining leads of the twelve-lead electrocardiogram from the acquired electrical signals.